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## Discussion

## Ethical consideration on use of seclusion in mental health services

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## ABSTRACT

Seclusion was widely used in mental health service, which had caused various negative effects on patients and nurses. In China, the clinical use of seclusion was gradually increasing, which had led to ethical dilemma and had gained public concern. This article aimed to synthesize the ethical issue according to the principle of autonomy, justice, beneficence, and non-maleficence. Given that nursing workforce was limited and work burden among psychiatric nurses was heavy, seclusion was one of coercive interventions managing aggressive behavior. In relation to cope with ethical dilemma, it was proposed to improve therapeutic environment, and to apply de-escalation technique. Additionally, reducing clinical use and adverse effects of seclusion was also important, this goal would be achieved by building appropriate patient-nurse relationship, increasing staff engagement, and promoting guideline of seclusion.

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## What is known?

- Seclusion was widely used in mental health service, which had caused various negative effects on patients and nurses.
- Clinical use of seclusion was gradually increasing, which had led to ethical dilemma and had gained public concern.

## What is new?

- This article had synthesized the ethical issue according to the principle of autonomy, justice, beneficence, and non-maleficence.
- To cope with the ethical dilemma, it was proposed to improve therapeutic environment, and to apply de-escalation technique.
- Reducing clinical use and adverse effects of seclusion was also important, this goal would be achieved by building appropriate patient-nurse relationship, increasing staff engagement, and promoting guideline of seclusion.

## 1. Introduction

Seclusion was a commonly used coercive intervention in mental health settings, but the concept of seclusion among different disciplines varied greatly. However, following words were usually adopted to define the concept of seclusion, including individual, isolation, involuntary, and illiberality. To synthesize, seclusion in mental health service was referred as “when an individual posing aggressive or disruptive behavior, the conductor was involuntarily isolated in limited space, such as a secured room or closed area” [1–5]. Previous researches of western countries showed, among newly admitted patients of psychiatric departments, the prevalence of seclusion ranged from 10.0% to 35.0% [6–8]. Further researches found the clinical use of seclusion was closely related to individual characteristics and therapeutic environment. In mental health settings, young male patients, being diagnosed of severe mental illness, presenting aggressive behavior, and involuntary admission, were risk factors of seclusion [2,9–13]. Besides, studies of therapeutic environment claimed, inferior therapeutic environment (narrow space, poor hygiene and decoration) resulted in higher incidence of seclusion [14–16].

Though the clinical use of seclusion aimed to reduce injury caused by aggressive and disruptive behavior, more attention

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should be paid to the adverse effects of seclusion [8,17]. First of all, the use of seclusion caused unexpected emotional burden toward patients and medical personnel, such as traumatic experience, negative experience, depression, and panic [2,18]. Besides, service users also explained clinical use of seclusion deteriorated nurse-patient relationship because it had caused the sense of distrust on patients [19]. Economically, Mental Health Commission (2014) reported overuse of seclusion had increased financial cost of government [20]. Given that the use of seclusion had risen critical impacts on service users, nurses, and mental health settings, nursing experts proclaimed interventions reducing seclusion should be implemented. Studies had identified the strategy of reducing clinical use of seclusion, including improving therapeutic environment [21], engagement of medical personnel [22], using de-escalate technique [23], and staff training [16,24–26].

Recent years, social attitude toward mentally ill patients emphasized providing less compulsive care, therefore ethical consideration of seclusion had received greater public concern [27]. In regard to the clinical use of seclusion, some experts highlighted eliminating the use of seclusion because it breached patient's willing. In contrast, others supported seclusion was an important intervention guaranteeing the safety of patients and medical personnel. In China, the clinical use of seclusion was gradually increasing and had gained public concern. Medical personnel and social experts were seeking by what approaches and to what extent could seclusion guarantee the safety of service users. Therefore, this article would present ethical consideration of seclusion, and explore possible approaches improving clinical use of seclusion based on current situation of China. The ethical principle of autonomy, justice, beneficence, and non-maleficence, would be discussed respectively. Significantly, this article will seek feasible alternatives and interventions to reduce the adverse effects of seclusion.

## 2. Ethical consideration of seclusion

### 2.1. Respect patients' autonomy

Autonomy was defined as individuals were able to make their own decision according to personal value. The ethical dilemma of maintaining individual autonomy and maintaining public benefit had existed for a long time, and it is also the basic ethical problem for mental health service [28]. From psychiatric nurses' perspectives, the main responsibility was to protect patients from getting hurt, but sometimes such protection was against to patients' willing. For example, when facing patients with aggressive behavior, nurses had to protect other patients (public benefit) and to respect the individual autonomy (no seclusion), which had caused the ethical stress for nurses [29]. Furthermore, seclusion was a coercive intervention which was opposite the patient-centered care, because it was against patients will and had produced negative effects on patients [30]. However, the sole aim of seclusion was to ensure the safety of patients [31], under this circumstance, in order to protect the safety of the major patients, seclusion was acceptable and necessary. Muir-Cochrane and Holmes explained "based on the consequence of acts, adopting the utilitarian position and limiting individual autonomy were appropriate in order to prevent harmful consequences" [28]. Therefore, when safety was threatened, individual autonomy might be compromised, indicating that seclusion was acceptable in regard to protect patients. But seclusion should be implemented in a way that respects patients' autonomy. For example, nurses were obligated to obtain the informed consent from patients, and to explain the reason as well as the likely duration of seclusion [27].

If a patient refused the seclusion, nurses should obtain informed

consent from the next of kin. Some experts synthesized that autonomy was not violated by the seclusion, but patient's mental status. Experts explained patients were incompetent to make the correct decision or behave properly because of extreme mentally disability. Patients who were unable to self-govern, lose the autonomy by mental disorder rather than seclusion [32,33]. Likewise, Prinsen and Van Delden elucidated that autonomy was based on the "self-sufficiency and independency", because autonomy could not exist without any restrictive factors. In other words, when patients had self-destructive behavior, seclusion helped to regain their autonomy rather than threaten it [27]. Undoubtedly, the use of seclusion had violated the autonomy of patients to some extent. However, in terms of public benefit, seclusion was acceptable which should be implemented in the way that respected patient's autonomy.

### 2.2. Maintain the justice

Justice was defined as, individuals had the right to receive the equal care despite their background, such as gender, race, sexual orientation, education level, and so on [34]. Universal Declaration of Human Rights (UDHR) emphasized that everyone was "equal in dignity and rights". However, some psychiatric patients were not treated equally, because these patients lost their right to be treated as a valued person [35]. Some secluded patients stated that they did not receive equal nursing care service as other patients, because the seclusion room was in poor condition and their need had not been satisfied [36,37], these patients even condemned that they were treated as "insanity" rather than "mankind" [38].

Justice was one of the fundamental rights of mankind, patients with the mental disability still had their inherent rights to be treated equally, their integrity and dignity should also be respected. Moreover, the unequal care service had not only caused patients traumatic experience that against the principle of non-maleficence, but also had destroyed the relationship between patient and nurses, making patients be hostile to nurses. Hence, any seclusion that ignored the justice should be prohibited. When applying seclusion to manage the aggressive/self-harm behavior, nurses should treat patients equally and satisfy patients' needs [20].

### 2.3. Improving beneficence

Beneficence was one of ethical principles of guiding health care providers to benefit patients [32]. It was nurse's obligation and responsibility to protect patients from getting hurt. Seclusion was originally developed to guarantee the safety of patients [3]. However, there was an ethical dilemma for nurses when they conducting seclusion—that was how to balance the interest between individual and other patients. When facing aggressive behavior, it was reasonable and necessary for nurses to seclude the patient, but the seclusion should be conducted in a less harmful way. In order to protect the benefit of secluded patients, Mental Health Commission (2001) issued a guideline of seclusion for practitioners which had highlighted the importance of respecting patients' right, dignity, and integrity during seclusion. For example, it was required that seclusion only be used under the circumstance of the "immediate threat", duration of seclusion should be the minimum period to prevent immediate and serious harm. During the seclusion, the patient must be under close observation that nursing staff should be accessible all the time and satisfy patient's needs [31]. This guideline to the most extent reduced the negative effects of seclusion and protect patients' interest, which was in accordance with the principle of beneficence by balancing individual and public interest.

In addition, from the perspective of utilitarianism, applying

seclusion was ethically rational as it led to positive consequence—most patients had been protected [39]. However, from the perspective of deontology, the clinical use of seclusion had its limitation since it had breached nurses' obligation and duty [40]. However, evidence had shown, even though the use of seclusion had caused negative effects on patients, medical personnel agreed seclusion could help manage aggressive behavior [8,17,19]. Based on mentioned above, the clinical use of seclusion was in line with the principle of beneficence.

#### 2.4. Reducing harms

Non-maleficence could be understood as to do no harms. From this aspect, it seemed that there was a conflict between applying seclusion and the principle of non-maleficence. However, as demonstrated above, the purpose of seclusion was to ensure safety of patients, which corresponded to the principle of beneficence and non-maleficence. Hence, the ethical dilemma was how to balance therapeutic object and the side effects of seclusion [41]. The guideline and reduction strategies issued by Mental Health Commission had applied an appropriate example to handle this ethical dilemma [20,31]. It was recommended some interventions that nurse can employ to reduce the adverse effects of seclusion, such as encouraging service users to give feedback about the seclusion, and implementing a structured risk assessment before seclusion. Seclusion could be seen as an intervention that with good purpose (guarantee people's safety) but sometimes resulted in the negative consequence (causing negative effects to patients). Even though seclusion might cause some adverse effect, it was still appropriated to clinical work because the therapeutic goal of seclusion outweighed its adverse effects.

### 3. Current situation of mental health service in China

#### 3.1. Mental health law of China

The mental health service in China was not well developed until late 1990s. The first national mental health law was issued in May 2013 [42]. In regard to the clinical use of seclusion, national guideline governing seclusion was unavailable yet [43]. Nursing experts were gradually aware the importance of standardizing clinical use of seclusion, therefore guidelines, regulations, and rules, had been developed on basis of ethical consideration.

#### 3.2. Shortage of resource

Nowadays, the resource of mental health service was inadequate in China. The numbers of registered psychiatric nurses and beds were 43,788 and 246,392, respectively, accounting for the nurse-patient ratio was only 0.18:1. The intensive human resource had resulted in the heavy workload of psychiatric nurse, and such situation in rural area was even worse [44]. In inpatient departments of psychiatric hospitals, an on-duty nurse was usually in charge of at least six patients. Hence, it was unpractical to only focus on aggressive patients, then nurses were prone to use seclusion to manage agitated patients [45].

Besides, the imbalance of resource allocation of mental health service had contributed to the use of seclusion in rural area. Urban mental health settings generally received more governmental investment than those in rural area, thus the psychiatric hospitals in rural area were in poor condition. Approximately 66.7% registered psychiatric patients hospitalized in rural area, the rural psychiatric hospitals lacked in necessary condition of coping with aggressive behavior in a more patient-centered manner [46]. Therefore, using seclusion was a relatively acceptable intervention coping with

aggressive behavior.

#### 3.3. Current use of seclusion

In China, very few studies had explored the clinical use of seclusion. The investigation by Min (2010) showed the incidence of coercion (including seclusion and physical restraint) was 42.6%. However the study by Min (2010) had not reported the respective incidence of seclusion and physical restraint [47]. Further studies explained aggressive behavior, disturbing behavior, and leaving the hospital without permission, were three major reasons of using seclusion in psychiatric hospitals [43,47,48]. In regard to attitude toward, patients defined seclusion was a kind of punishments causing negative psychological experience; in contrast, nurses considered seclusion was an effective measurement to protect patients from harm caused by aggressive behavior [43,47,49].

### 4. Suggestions for practice

In spite of the adverse effects, the therapeutic goal of seclusion had outweighed its side effects [45]. Therefore, exploring alternatives and interventions reducing adverse effects of seclusion was a vital part of nursing practice.

#### 4.1. Using alternative measures

##### 4.1.1. Improving therapeutic environment

Previous studies had asserted improving therapeutic environment helped to reduce the clinical use of seclusion [15,16,21,50,51]. Experts recommended psychiatric hospital to establish "comfort room" to help patients relieve the conflict. Usually, the comfort rooms were suggested to be decorated in warm style, equipped with green plants and necessary home appliances [52]. The comfort rooms facilitated patients to engage in therapeutic process and to give feedback of therapy, by which helped patients relieve the aggression [14,20]. Therefore, producing a safe and warm therapeutic environment benefited to reduce clinical use of seclusion to some extent.

##### 4.1.2. De-escalation technique

De-escalation technique was comprehensive skills to help aggressive patients calm down. In general, de-escalation technique included several key elements, these were well trained personnel, appropriate patient-nurse relationship, humanistic care service, excellent communicating skill, and risk assessment in the early stage, respectively [53,54]. Studies had exhibited de-escalation technique was effective in coping with aggressive behavior in mental health settings [55–57]. Noticeably, Lavelle et al. reported approximately 60.0% of seclusion was reduced after using de-escalation technique in initial stage of conflict [58]. However, de-escalation technique was not widely used in China, mental health organization should provide training of de-escalation technique to nurses.

#### 4.2. Reducing adverse effects of seclusion

Despite the use of seclusion had caused adverse effects on patients, empirical studies mentioned several approaches of reducing adverse effects of seclusion [59]. First of all, the interaction between nurses and patients, and meeting basic need, were identified to be valuable approaches to reduce adverse effects of seclusion [60–62]. Significantly, nurses should gain informed consent from patients or the next kin [63]. Besides, the time of seclusion should be as short as possible. The national guideline of Ireland proposed seclusion should be removed within 8 hours since initiation, meanwhile rules

of China advised the seclusion time should be less than 24 hours [42,64]. In relation to minimize psychological impacts on patients, necessary explanation, providing patient-oriented care with empathy, and respecting patients' dignity, were found to be important strategies of reducing psychological trauma caused by seclusion [31,65].

#### 4.3. Advices of reducing seclusion

##### 4.3.1. Increasing staff engagement

According to Mental Health Commission (2014), staff's engagement was closely associated with the clinical use of seclusion [20]. By empowering employee in decision making, transformative leadership enhanced the level of staff engagement in improving quality of care [66]. However, in China, the culture of hospital administration was centralization, low empowerment of employee had resulted that not all staff were engaged in important decision making [67]. Therefore, staff engagement was crucial in developing strategy of reducing clinical use of seclusion [68].

##### 4.3.2. Promoting guideline of seclusion

In China, the lacking resource of mental health service had increased work burden among psychiatric nurses, thus nurses were inclined to use seclusion when patients presenting aggressive behavior [44,46,69]. The national mental health law had not covered the use of seclusion, thus sound rules governing the use of seclusion were warrant [43]. In ChengDu China, incidence of coercive measurement was reduced after issuing a practical guideline managing the clinical use of seclusion [70]. Therefore, being enlightened by the cases above, developing practical guidelines managing the clinical use of seclusion would be feasible approach to reduce its use.

#### Authors' contributions

This manuscript was in collaboration between all authors. Chaodun Zheng, Sijue Li, and Junrong Ye, conceived this study. Yingmei Chen, Aixiang Xiao, Sijue Li and Yao Liao retrieved the literature and discussed the ethical principles. Yao Liao, Yu Xu, Yunlei Zhang, Zhichun Xia, Lin Yu and Jiankui Lin co-worked on reviewing status quo of China. Chaodun Zheng, Junrong Ye, Sijue Li and Chen Wang drafted the manuscript, Chaodun Zheng contributed to manuscript re-structuring and language editing in revision. The revised manuscript had been approved by all the authors. Junrong Ye was assigned to be the corresponding author of this manuscript. Chaodun Zheng and Sijue Li contributed to this study equally, thus Sijue Li was assigned to be co-first author.

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#### Conflicts of interest

All authors had declared that they have no competing interests.

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#### Appendix A. Supplementary data

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